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From: lefed (Lev A. Fedorov)

To: fax: 1012123278651

Subject: from Lev A. Fedorov

Professor J. Lederbeg New York, USA FAX: 212-327-8651

Dear Professor Lederberg,
I'd be glad if the message with CW-topic, which I sent to NRC
yesterday, is interesting for you.
Best wishes,

Sincerely yours Lev A. Fedorov (Moscow)

Phone/fax: + 7-095-1290596, E-mail: lefed@glas.apc.org.

Donald L. Siebenaler
Study Director Board on Army
Science and Technology
(National Research Council
National Academy of Sciences)
Washington, USA
Fax: 202-334-2620

September, 14

Dear Mr. Siebenaler,

When visiting the USA in the spring of the current year I received from you a copy of the last NRC's document on the subject of Chemical Weapons disposal ("Recommendation for the Disposal of Chemical Agents and Munitions", 1994). As a whole this is a very interesting and deep document. However, I would consider it necessary to inform you of my thoughts connected with this document and caused after examining the practice of Russian and USA authorities in the preparation of the real disposal of Chemical Weapons.

1. Both in the USA and in Russia the main technology of destruction of chemical agents involves their incineration: direct incineration of chemical agents (USA) and incineration of chemical agents after their preliminary detoxication (Russia). There are no serious scientific data which would exhaustively characterize the content of the emission due to the incineration and the toxic influence of microquantities of accompanying substances unknown yet.

Conclusion: the known risk assessments of the effects of emission from incinerators of chemical agents or the products of their detoxication cannot be regarded as absolutely correct.

2. We do not have data published either by the USA or Russia about long-term toxic effect on people of microquantites of known nerve gases (sarin, soman, V-gas). According to the information passed to us there are no cases of such poisonings in the USA. In Russia a few thousand people that produced V-gas in Chuvashia in 1972-1987 regard themselves poisoned by V-gas due to the fact that experiment (possibly, unintentional one) on the toxic effect of microquantiies of V-gas was

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carried out on them. In this connection the following should be kept in mind:

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- a) The authorities have been forced to acknowledge that 170 out of thousands of workers which produced V-gas got occupational disease. The acknowledgment of the other cases is the matter of time.
- b) Recently Russian authorities had to extend the hazardous area round the plant producing V-gas in Chuvashia from 2 km to 4 km. This occurred 7 years after the finishing of V-gas production. Further extension of that area is the matter of time.
- c) According to the official statement of Russian authorities the concentration of V-gas during its production in Chuvashia did not exceed permissible levels.
- d) In Russia the regulation of permissible levels of nerve gases is stricter that in the USA.
- Conclusion: In any operation with nerve gases (storage, transportation, disposal) presently known risk assessments of their effect cannot be regarded as absolutely correct.
- 3. It becomes clear, when considering technologies of disposal of Chemical Weapons, that so called alternative technologies are in fact not in equal position with those officially approved (baseline system). Both in the USA and Russia the approved technologies have already been attached to the dates determined by the Chemical Weapons Convention and juridical documents (decisions of the USA Congress and the government of Russia). As a result the alternative technologies never were in equal conditions with those of baseline system.
- Conclusion: The main principle of the Chemical Weapons
  Convention is violated (article VII.3) the top
  priority of providing safety of people and
  environment over the terms, documents,
  allocations, etc.
- 4. These remarks are not the only ones but even they demonstrate that when carrying the chemical disarmament we come across a number of difficulties. One of them is the 10-year period of disposal of all stocks of Chemical Weapons. It is absolutely unreal. At present I sharply write in press for the quickest ratification by Russia of the Chemical Weapons Convention but on condition that we will not be bounded by so strict terms. Ecological safety is more important than terms, though, not less than the others, we desire to get rid of Chemical Weapons as soon as possible.

The desire for elucidation of my position had arisen after I have examined the discord between the Army and some ecological organizations in USA over the risk assessment presented in the NRC's document.

I hope that my thoughts will not seen redundant to you when working over documents related to such a complicated field of

human activity as disposal of Chemical weapons.

With best regards,

Dr. Lev A. Fedorov
President of the "Union for
Chemical Safety" (Russia),
fax: +7-095-1290596
E-mail: lefed@glas.apc.org